

Amendments To the Claims:

Please amend the claims as shown. Applicant reserves the right to pursue any canceled claims at a later date.

1. (currently amended) A method for the surface preparation of a metal component having a curved surface to accept a ceramic coating, comprising:

~~obtaining a desired contour line geometry data for the metal component;~~  
measuring an actual contour line geometry of the curved surface;  
~~inputting data responsive to the actual contour line geometry data into a control system;~~  
~~comparing the actual geometry data with the desired contour line geometry data; and~~  
controlling a plurality of spray parameters of ~~a~~ an abrasive grit spray jet via the control system based on the ~~comparison of the actual geometry data and the desired contour line geometry data~~ to direct ~~a particle source~~ abrasive particles toward the metal component, the spray parameters comprising: a blasting distance, a blasting intensity, a blasting angle and a blasting time such that at least ~~one of the parameters~~ the blasting angle parameter remains constant during the surface preparation.

2. (canceled).

3. (currently amended) The method as claimed in claim 1, wherein ~~the~~ metal is a superalloy.

4. (currently amended) The method as claimed in claim 1, wherein the blasting distance ~~of the particle source to the component~~ remains constant.

5. (currently amended) The method as claimed in claim 1, wherein ~~the~~ a particle source is moved relative to the metal component so that the blasting angle remains constant.

6. (previously presented) The method as claimed in claim 1, wherein the component has a base body with a base material, the base body having the component surface which, for a first coating to be applied to the base body, is treated with a first coating material.

7. (previously presented) The method as claimed in claim 6, wherein the first coating material used is an MCrAlX alloy, where M represents one or more elements comprising iron, cobalt and nickel, Cr represents chromium, Al represents aluminum and X represents one or more elements selected from the group consisting of yttrium, rhenium and the rare earths.

8. (previously presented) The method as claimed in claim 6, wherein the first coating also has the component surface which, for a second coating to be applied to the component, is treated with a second coating material.

9. (previously presented) The method as claimed in claim 1, wherein the component has a base body with a base material, a first coating comprising a first coating material being applied to the base body, and the coated component, for a second coating to be applied to the component, being treated with a second coating material.

10. (previously presented) The method as claimed in claim 8, wherein, in the coating process, a ceramic is used as the second coating material.

11. (canceled)

12. (previously presented) The method as claimed in claim 1, wherein the component used is a turbine rotor blade, a turbine guide vane or a heat shield element of a combustion chamber.

13. (previously presented) The method as claimed in claim 1, wherein the blasting angle on the component surface is approximately 20° to 90°.

14 - 17. (canceled)

18. (currently amended) A method for surface preparation of a metal component having a curved surface to accept a ceramic coating, comprising:

measuring a contour line geometry of the curved surface;

converting the measured geometry into ~~input~~ data; and

inputting the data into a control system ~~and comparing the data to a desired data set~~, the control system configured to control a plurality of spray parameters ~~based on the data and to~~ direct a particle ~~source stream~~ toward the metal component ~~to match responsive to the desired data to provide a surface treatment~~,

wherein at least ~~one of the parameters remains a~~ blasting angle parameter is controlled responsive to the data to remain constant during the surface treatment and the surface ~~preparation treatment~~ results in the curved surface having a substantially uniform surface roughness.

19. (currently amended) The method as claimed in claim 18, wherein the particle ~~source stream~~ is moved relative to the component so that the blasting distance remains constant.

20. (canceled).

21. (currently amended) The method as claimed in claim 1, wherein the blasting distance is measured from ~~the~~ a particle source to a point of impingement of a the spray on the metal component surface.

22. (previously presented) The method as claimed in claim 1, wherein the blasting angle is measured as an angle between a direction of the spray and a local tangent to the metal component surface at a point of impingement.

23. (currently amended) The method as claimed in claim 1, wherein the blasting intensity is measured as a flow rate of the ~~particle~~ particles.

24. (previously presented) The method as claimed in claim 1, wherein the blasting time is measured as a residence time of the spray on a selected section of the contour line.

25. (previously presented) The method as claimed in claim 18, wherein the spray parameters include: a blasting distance, a blasting intensity, a blasting angle and a blasting time.

26. (currently amended) The method as claimed in claim 1, wherein the metal component is moved relative to the spray-jet.

27. (currently amended) The method as claimed in claim 1, wherein the metal component is rotated relative to the spray-jet.

28. (previously presented) The method as claimed in claim 1, wherein a spray head moves in two Cartesian directions and pivots.

29. (new) A method for the surface preparation of a metal component having a plurality of differently curved or oriented surfaces, the method comprising:

obtaining data representative of contour line geometries of at least two surfaces of the component; and

controlling spray parameters of a spray of abrasive particles directed toward the component to be responsive to the data to produce a different surface roughness on at least two of the surfaces, with the surface roughness on each of the at least two surfaces being homogeneous across each respective surface.

30. (new) A method for the surface preparation of a component, the method comprising:

obtaining data representative of a contour line of a surface of the component; and

controlling spray parameters of a spray of abrasive particles directed toward the surface responsive to the data to produce a surface roughness according to a predetermined non-constant function along the contour line.